Appl. No. 10/808,774 Amdt. sent September 14, 2005 Reply to Office Action of July 5, 2005

## Amendments to the Claims:

1.

This listing of claims will replace all prior versions, and listings of claims in the application;

## **Listing of Claims:**

1

(Currently amended): A computer system with a plurality of database 2 management systems comprising: 3 a disk storage system that stores a plurality of heterogeneous databases; 4 a module that combines databases, said module disposed in a server connected to 5 said disk storage system; and 6 a network that interconnects said disk storage system and said server, wherein 7 said module that combines databases, responsive to receiving user-requested specifications, 8 controls data transfer bandwidth for reflecting update data from a-one of said databases in said 9 disk storage system to another of said databases; and wherein said disk storage system performs 10 resource allocations for said bandwidth responsive to control from said module that combines 11 databases. 1 2. (Currently amended): A computer system with a plurality of database 2 management systems comprising: 3 a disk storage system that stores a plurality of heterogeneous databases; 4 a module that combines databases, said module disposed in a server connected to 5 said disk storage system; and 6 a network that connects said disk storage system with said server, wherein said 7 module that combines databases, responsive to receiving user-requested specifications relating to 8 a requested refresh rate and a replication data volume, determines a required bandwidth and 9 resources therefor in order to satisfy said user-requested specifications, and wherein said module 10 that combines databases controls resources of said disk storage system; and wherein said disk 11 storage system performs resource allocations for said bandwidth based on control from said 12 module that combines databases.

1	3. (Currently amended): A computer system with a plurality of database		
2	management systems comprising:		
3	a module that controls refreshes responsive to a requested refresh rate;		
4	a module that controls replica creation; wherein said module that controls		
5	refreshes further comprises a module that combines databases, which instructs, at intervals based		
6	on said requested refresh rate, said module that controls replica creation to replicate at least one		
7	database; and		
8	a disk storage system that stores a plurality of heterogeneous databases, wherein		
9	said disk storage subsystem reflects update data from a first database to a second database that is		
10	different from said first database under control of said module that controls replica creation.		
1	4. (Currently amended): A computer system with a plurality of database		
2	management systems for performing database replication, said computer system comprising:		
3	a disk storage system that stores a database; and		
	·—		
4	a module that combines databases which, when data from a data warehouse		
5.	database is to be reflected in a plurality of data marts, measures replication processing time and,		
6	if said processing time is at or exceeds requested specifications, creates a replica of a data		
7	warehouse database in said disk storage system.		
1	5. (Currently amended): In a computer system comprising a first server and		
2	a second server, interconnected by a network to a disk storage subsystem, a method for		
3	replicating content of a first database associated with said first server to a second database		
4 .	associated with said second server, said first database and said second database disposed in said		
5	disk storage subsystem, said method comprising:		
6	allocating resources to perform a copy within said a disk storage subsystem, said		
7	disk storage subsystem comprising a first database and a second database different from said first		
8	database, said first database associated with a first server, said second database associated with a		
9	second server: and		

10	replicating content from said first database to said second database; wherein said			
11	replicating is performed using said resources in said disk subsystem substantially independently			
12 .	of sending said content over said network.			
1	6. (Original): The method of claim 5 wherein said first database is of a first			
2	format and said second database is of a second format, said replicating content from said first			
-3	database to said second database in said disk subsystem further comprising:			
4	replicating said content from said first database to an intermediate database, said			
5	intermediate database disposed on a shared volume of both said first format and said second			
6	format; and			
7	replicating said content form said intermediate database to said second database.			
1	7. (Original): The method of claim 5 wherein said computer system further			
2	comprises a third server, said method further comprising:			
3	receiving at said third server at least one of a plurality of requested specifications			
4	relating to replication;			
5	determining a data transfer capacity according to said specifications;			
6	determining at least one of a plurality of data transfer capacity settings according			
7	to said data transfer capacity;			
8	notifying said disk subsystem of said data transfer capacity settings; and			
9	allocating resources in said disk subsystem for data transfer based on said data			
10	transfer capacity settings.			
1	8. (Currently amended): In a computer system comprising a first server and			
2	a second server, interconnected by a network to a disk storage subsystem, a computer program			
3	product for replicating content of a first database associated with said first server to a second			
4	database associated with said second server, said first database and said second database			
. 5	disposed in said disk storage subsystem, said computer program product comprising:			
6	code for allocating resources to perform a copy within said a disk storage			
7	subsystem, said disk storage subsystem comprising a first database and a second database			

8	different from said first database, said first database associated with a first server,	said second
9	database associated with a second server;	

code for replicating content from said first database to said second database; wherein said replicating is performed using said resources in said disk subsystem substantially independently of sending said content over said network; and

a computer readable storage medium for holding the code.

- 9. (Currently amended): A disk storage subsystem, said disk storage subsystem operable in a computer system comprising a plurality of computers, said plurality of computers interconnected to said disk storage subsystem by at least one of a plurality of information channels, wherein said disk storage subsystem copies content from a first database to a second database that is different from said first database using resources in said disk subsystem substantially independently of sending said content over said information channels; and wherein said disk storage subsystem performs copies said content in accordance with a resource allocation received from one of said plurality of computers, said resource allocation based upon at least one of a plurality of data transfer capacity settings determined by said one of said plurality of computers in accordance with a data transfer capacity and at least one of a plurality of received specifications.
- system comprising a first server and a second server, interconnected by a network to said disk storage subsystem, wherein said disk storage subsystem replicates content of a first database associated with said first server to a second database associated with said second server, said first database and said second database disposed in said disk storage subsystem, said first database being different from said second database, wherein said disk storage subsystem allocates resources to perform content replication within said disk storage subsystem; and said disk storage subsystem replicates content from said first database to said second database; wherein said replicating is performed substantially independently of sending said content over said network.

.6

management systems comprising: a disk storage system storing a plurality of heterogeneous databases; means for combining databases disposed in a server connected to said disk storage system and a network, <u>for receiving user-requested specifications</u>, and <u>for controlling data</u> transfer bandwidth involved in reflecting update data from a database in said disk storage system to another <u>and different</u> database; and said disk storage system performing resource allocations for said bandwidth based on control from said database combining means.

- 12. (Currently amended): A computer system with a plurality of database management systems comprising: a disk storage system storing a plurality of <a href="https://example.com/https://e
- 13. (Currently amended): In a computer system performing database replication, a computer system with a plurality of database management systems comprising: a disk storage system storing a plurality of databases, connected to a network, and including an interface relating to a plurality of heterogeneous database management systems, a shared volume acting as an intermediate file in replication operations, a plurality of host paths sending and receiving data to and from a server; and means for creating replicas creating snapshots of a database serving as a transfer source of data in replication operations; means for combining databases disposed in a server connected to said network, <u>for receiving user-requested</u> specifications relating to requested data refresh rates and replication data volume, and <u>for</u> specifying a number of said host paths, a number of said shared volumes, and a number of replicas based on snapshots in order to satisfy said requested specifications; and wherein said

Appl. No. 10/808,774 Amdt. sent September 14, 2005 Reply to Office Action of July 5, 2005

**PATENT** 

- disk storage system allocates said host paths and said shared volumes as specified, executes snapshots, reports results to said server, and allocates resources relating to said bandwidth.
- 1 14. (Currently amended): A computer system with a plurality of database
  2 management systems comprising: means for controlling refreshes receiving a requested refresh
  3 rate; means for creating replicas controlling replica creation; and said refresh controlling means
  4 including means for combining database instructing, at intervals based on said requested refresh
  5 rate, said replica creating means to execute replication, and a disk storage system storing a
  6 plurality of <a href="https://execute.net/https://execute.n